Iowa CONSERVATIONIST

lume 23 April, 1964 No. 4

Two New Cover Planting Programs

Jim Sherman Photo

This wild plum planting offers abundant wildlife cover.

Carol Buckmann

'wo new planting programs have been established in cooperation h the Conservation Commission to aid wildlife in its quest for food cover. One is a new windbreak practice program and the other a ure Farmers of America wildlife conservation program.

'he new windbreak program, sponsored by the Agricultural Stabi- tion and Conservation Service, will supplement the need for low ub protection.

Iany windbreaks have deteriorated and no longer benefit wildlife as y should. The new windbreak program is set up to help remedy i situation. In many windbreaks, ground cover is lacking as the er branches of older trees are too high to provide cover.

mall game animals and game birds, particularly pheasants, come to dbreaks in and around farm buildings and lots for protection from vy winter snows.

'he new program makes it possible to plant cover plantings and an 80 per cent cost-sharing payment allowing persons to get sery stock from commercial nurseries. (State grown nursery stock not be used in windbreaks.)

'he cost-sharing payment includes the cost of the game shrubs, paring seedbeds and planting costs not to exceed $150 per project. s is one of the cost-sharing practices available to landowners with ıey provided from congressional appropriations.

The wildlife shrub borders are done in a two-row minimum around windbreaks or groves. An area of not less than two or more than 20 feet wide should be prepared with the plowed area extending at least three feet beyond the outside row. A seedbed should be prepared prior to spring.

The width between the rows should be two to four feet. For planting methods, follow the directions given in the United States Department of Agriculture leaflet, number 374, under multiflora rose. The cost-sharing will be limited to these game shrubs: multiflora rose, wild plum, ninebark, lilac and bush honeysuckle.

For a satisfactory project, plantings must be protected from livestock and fire. Many border plantings will need cultivation or mowing for weeds. If chemical sprays are used, they must be approved by a designated representative who must also approve the plan including the need, kind and amount of shrubs. No cost-sharing is available for weed control by mowing or chemicals.

Further information on this new practice is available through the local A.S.C. offices in each county and the 1964 Agricultural Conservation Practice Handbook for Iowa.

FFA Program

The new FFA program, sponsored by the Sears-Roebuck Foundation, is one way to get young people to participate in an active wildlife

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COMMISSION MINUTES

Des Moines, March 3

LANDS AND WATERS

Approval was given for a construction permit on West Okoboji Lake for a water line to cross the shoreline to two private areas for Hoover and Aaker.

The Highway Commission received approval for a construction permit for a Des Moines River bridge in Wapello County.

A stone plaque was accepted from the Montgomery County Conservation League for use at Viking Lake with certain specified reservations.

Approval was given to accept a deed for a beach owned by Dr. Greene on West Okoboji Lake, and the Director was asked to request the Attorney General to quiet title on the area, called Terrace Park Beach.

Approval was given to various concession contracts in the state parks for 1964 season.

Approval was given for the acquisition of five parcels of land comprising 290 acres for the Lake Anita area at a total cost of $72,100.

COUNTY CONSERVATION ACTIVITIES

Carroll County received approval for the acquisition by lease of seven parcels of land containing approximately one acre each for ten year lease at a total cost of one dollar each to be used for the establishment of wildlife habitat areas.

Grundy County received approval for the acquisition of .65 acres of land on Highway 14 for use as a safety rest area.

Jackson County received approval for the acquisition of the Duck Creek Area adjacent to the Mississippi River consisting of 2½ acres of land by a license from the U. S. Corps of Engineers, to be used for camping and picnicking by boaters only.

Marshall County received approval for the acquisition at no cost of 1.93 acres of land from the Central Iowa Fair Board upon which will be located the central headquarters for the County Conservation Board, the main administration building for the Central Iowa Fair Board, and a picnic area.

Tama County received approval for acquisition of Manatt's Iowa River Access Area, consisting of 5.75 acres of land located on the south side of the Iowa River west of Highway 63 by a right-of-way lease from the Iowa State Highway Commission, and 2 acres by a lease costing $1.00 per year from the Manatt's Sand and Gravel, Inc., to be utilized primarily for development of the river access for fishermen and boaters.

Carroll County received approval for a development plan for seven farm-game habitat areas.

Floyd County received approval for a development plan for the Nora Springs Mill Dam Park which will include picnicking, camping and sanitary facilities, and a small practice archery range.

Franklin County received approval for a development plan for Robinson Park located at Otter Creek for use as a picnic and camping area.

Howard County received approval for a development plan for Lidtke Park located on the Upper Iowa River at the north edge of Lime Springs, to include picnic area, camping area, picnic shelter, sanitary facilities, boat launching ramp, etc.

Polk County received approval for development plan for the Camp Creek Recreational Area to be acquired near the town of Mitchellville, which would include picnicking and camping areas, a softball diamond, a small lake, and a reforestation and preservation project. Polk County also received approval for a development plan for the Yeader Creek Lake Recreational Area which is located near the southeast edge of the City of Des Moines, and will include a 220-acre artificial lake around which a complete outdoor recreational area will be developed.

Washington County received approval for a development fund for the Hayes Timber Area which will be used primarily as a hardwood timber preserve for an outdoor classroom.

Palo Alto County received approval for a development plan for Eddies Wayside Park, located near West Bend, which would include a picnic area and camping facilities.

FISH AND GAME

The Commission moved and passed a resolution that no action be taken concerning the Maquoketa River channel diversion project by Timmer, until ownership of the land in question is settled.

A resolution was approved which would set up recommended shooting preserve standards for Iowa.

Approval was given to a resolution of necessity for the Meadow Lake Area in Adair County.

Construction of a residence was approved for the Otter Creek Marsh Area in Tama County.

COVER—

(Continued from page 25)

program and also aid wildlife. It is designed to develop wildlife co servation areas on privately-owned farms.

In this program, two general projects can be planned. The first i farm pond improvement plan designed to benefit wildlife and a humans by developing recreational benefits such as fishing. The oth is a program to aid the development of wildlife nesting, feeding a protection areas. An active FFA chapter may develop either of the projects as a community service project.

The Conservation Commission secures the necessary land contr provides technical assistance and the minimum material includi fencing materials, trees and shrubs for planting and fish for stocki ponds. In turn, FFA chapter members provide the necessary work carry out the plan.

These projects can be developed by an FFA chapter in an appro vocational agricultural department of an Iowa public school in coop ation with the State Agricultural Education staff in Des Moines.

An interested FFA chapter prepares an application sent to State Consultant, Agricultural Education, Des Moines, before a agreement is made or work started. The members work closely w the landowner in selecting an area.

The local conservation officers will help locate an area or check area selected to see that it meets the requirements for a Farm-Ga Habitat area providing the necessary wildlife benefits. It is necessa to have a Farm-Game Habitat agreement from the Commission, a for the Commission to have land control prior to providing the materi for the project.

FFA members develop a plan and perform any needed work cooperation with the landowner. The work includes fencing, plant trees and shrubs, seeding and fertilizing, construction and erection suitable signs without charge.

Chapter members should also take photographs before and dur the project each year to show progress. An annual report will submitted each year for the initial three-year period to the St Consultant, Agricultural Education.

These new programs are just two of the ways to provide m wildlife cover and to insure additional wildlife for the sportsmen Iowa.

GENERAL

Travel was authorized to the Midwest Pheasant Council Meeting, Aberdeen, South Dakota; and the cooperative waterfowl banding project to be conducted in Canada in July. The Fisheries Section was authorized to pick up trout at Peterson and Spring Valley, Minnesota.

The Director was authorized to write the Iowa State Interim Committee to recommend that the restoration of Twin Lakes be carried on without interruption.

The Missouri River Coordinator was instructed to attend a meeting of the Little Sioux Intercounty Drainage Board, and officially register an objection to the continued existence of a "gradient stabilizer" in the Little Sioux River, five miles from the Missouri River.

A discussion was held concerning industrial pollution problems on the Mississippi River. The Director was instructed to write to new industries and advise them of the Commission's responsibility for fish and wildlife, pledge cooperation, and announce the Commission's obligation to take measures necessary toward curbing any future pollution problems.

A report was given concerning current projects and work of the Cooperative Fish and Wildlife Research Units at Iowa State University.

A motion was approved asking the Wildlife Society to consider a resolution which would recommend including the value of fish and wildlife in arriving at a co benefit ratio on river straight ing projects financed by the fede government.

The Commission was informe a hearing to be held by the St Health Department concerning Big Springs trout hatchery which occurred in December.

THE WHOOPING CRA

Roberts Mann

Somewhere, perhaps in the C fenokee or another remnant of primeval swamps in our south states, there may be a pair of giant ivory-billed woodpeckers not, they have become extinct the Whooping Crane is now rarest of all North American bi

The California condor has greatest wingspread and it, too dangerously near extinction. trumpeter swan is the heaviest that huge waterfowl, which been dwindling rapidly in numb is making a strong comeback s the establishment of suitable uges in four northwestern sta The whooping crane is the ta —with the body and long n erect it is almost as tall as a m Stalking through a marsh on s like legs, it is also the most jestic and stately.

The plumage of an adult wh er, male or female—except for conspicuous black wing tips, on the head—is satiny w Across each cheek, below the yellow eye, is a black mustach bristle-like feathers. Otherwise head is bare, with a reddish w

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WHY TO GO WHERE?

Jack Kirstein

o the Iowa camper with a kend or more available in the mer months, Iowa might pose roblem in finding a new place go for the most fun. Tackling problem from the right angle give the answers you want. or a chance, try deciding what want to see or do first, and pick the area. If you choose area first, many times your de- on is based on past enjoyment particular park, lake, or camp- und. While this is a good mea- of an area, you might be pass- up other areas as good or bet- than your present favorite. Be- e of first impulses at this stage our planning, and try the dif- nt or unknown spots to see ey may add spice to your sum- camping.

o help you make this decision, this list of categories of Iowa actions, or devise one of your : Boating, caves, fishing, for- , hiking, hills, lakes, marshes, re study, prairies, rivers, rock nations, streams, swimming. ow examine any and all infor- ion you can find on maps, in hures, newspaper articles, etc., nd some spot to visit. The fol- ng suggestions may help, as l information from other ces:

OATING . . . Backbone, Beeds e, Black Hawk Lake, Clear e, Geode, Green Valley, Lacey- sauqua, Ahquabi, Lakes Dar- g, Keomah, and MacBride ee Fires, Lake Wapello, Nine les, Palisades-Kepler, Pine e, Prairie Rose, Red Haw, Rock ek, Springbrook, Union Grove, ing Lake, DeSoto Bend, Missis- i and Missouri Rivers, Coral- Reservoir, and the Great es.

AVES . . . Maquoketa Caves, e's Peak, Backbone, Wildcat , Wapsipinicon, McGregor, De- h area.

ISHING . . . in addition to the ural and artificial lakes, try et's Marsh, upper reaches of psi, Cedar, Des Moines, Iowa, other rivers for game fish, and e rivers in southern parts of state for catfish. Dolliver, rge Wyth, Ledges, Lewis and k, Oak Grove, Oakland Mills, mel, and Walnut Woods State k. Yellow River Forest, Big k Access, Grannis Creek, Tur- River, Colyn Area, Willow gh, Decatur Bend, Lehigh a, and the Mississippi and Mis- i Rivers. Northeast Iowa coun- for trout.

ORESTS . . . Yellow River, nek, Stephens, Holst, White Hollow, and Pilot Mound.

IKING . . . any of the State ks, Forests, and Game areas.

ILLS . . . most spectacular are the Mississippi bluffs of northeast Iowa and the loess hills of western Iowa. You might try Waubonsie, Stone, MacBride, Pike's Peak, Bellevue, Backbone, as well as parks in other parts of the state.

Jack Kirstein Photo

Islands? One of the prettiest is at Pine Lake State Park near Eldora. Pine Lake is also popular for fishing, camping and swimming.

LAKES . . . these are basically the same as the boating areas listed above, but don't forget other lakes that offer beauty such as Lake Odessa, Colyn, Lewis and Clark, Marble Lake, Ingham, High, Iowa, Rush, Tuttle, Storm Lake, Rice Lake, Twin Lakes, etc.

MARSHES . . . Sweet's Marsh Big Marsh, Riverton, Ventura, Eagle Lake, etc.

NATURE STUDIES . . . outstanding here is the Wildlife Exhibit at the Ledges Park near Boone. Also of interest would be the Snyder Bend, Louisville Bend, and California Bend refuges on the Missouri River. Check with local game officials for the correct time to visit these refuges. Forney's Lake for the Spring Goose Migration and the fish hatcheries and game areas for other birds and animals. Wilson Island offers camping as well.

PRAIRIES . . . Hayden, Kalsow, Cayler, and Sheeder areas. These are fine to visit during several seasons watching the changing turf of wildflowers and plants. Take a camera and be sure to get out of the car and wander, looking closely for small specimens as you walk.

RIVERS . . . naturally the two big boundary waters, and others that criss-cross the state. An exceptional experience would be to travel the Great River road from northern to southern borders visiting the various parks along the way.

ROCK FORMATIONS . . . Gitchie Manitou, Ledges, Dolliver, Wildcat Den, Maquoketa Caves, Yellow River Forest, and others including Backbone and Pike's Peak.

STREAMS . . . Yellow River Forest, French Creek, Grannis Creek, Lizard Creek, Canoe Creek, Melanaphy Springs, etc.

SWIMMING . . . all the parks on natural and artificial lakes that have beaches and supervised areas. Some of these are exceptional as in the case of Clear Lake, Geode, Beeds Lake, Lacey-Keosauqua, Ahquabi, Keomah, Lake of Three Fires, Pine Lake, Red Haw, Rock Creek, Springbrook, Union Grove and Viking Lakes.

Remember that there are also county areas and parks, and that those above and others not listed also provide good Iowa recreation.

With a little study, you will find it pays first to figure out *WHY* to go where.

WHOOPING CRANE—

(Continued from page 26)

skin that is carmine on the crown. The heavy spear-shaped beak is mostly olive green. The long legs and huge feet are black.

The whooping crane was so-named because of its sonorous trumpetings unlike any other bird calls: "Ker-loo! Ker-lee-oo!"—bugle-like notes that may be heard for miles. Their volume and resonance are probably due to its extraordinary windpipe which, in an adult, is about five feet long, with 28 inches or more coiled in the keel of the breastbone.

Whooping cranes apparently mate for life and each spring a pair builds a nest which is a crude platform of rushes, cattails and other aquatic vegetation projecting a foot or so above the water in a swamp. On it she usually lays two big eggs, buff or olive colored and blotched with brown. The parents take turns at incubating them. When they hatch, the young are covered with brownish down and within a few hours are running nimbly after their mother. As they mature, young whoopers acquire spots and blotches of white but do not become fully adult and pure white until their third summer.

There were probably never more than about 1,500 whoopers at any time, despite early reports of vast flocks by people who apparently confused them with the somewhat smaller and slaty-gray sandhill cranes. Originally they nested in marshes of the prairie provinces in Canada, and the prairies of North Dakota, Minnesota, Iowa, and central Illinois. After 1922 nobody knew where they nested until 1955, when they were discovered in the Woods Buffalo Park, a vast wilderness area in northern Canada.

Originally they wintered mostly along the coastal lagoons of Texas and Louisiana, on the grasslands of Texas and Mexico, and sometimes on our Atlantic coast from Florida northward.

Between 1860 and 1920, slaughtered by hunters, and because their traditional nesting and wintering grounds were destroyed by drainage, agricultural and industrial developments, they almost disappeared. What saved them was the establishment, in 1937, of the 47,000 acre Aransas Wildlife Refuge on a peninsula near Corpus Christi, for wintering grounds.

At that time only 19 were wintering there and 11 more in Louisiana. In 1941 there were 21 there and one in Louisiana. Now there are 42 wild ones and, in the New Orleans zoo, a captive pair with four offspring. *Cook County Forest Preserve.*

THE FUNDAMENTALS OF FLY FISHING—PART III

Early Spring Technique

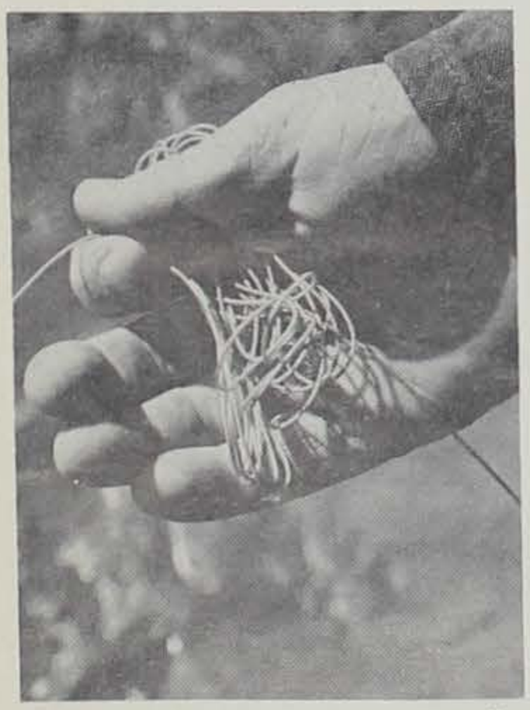
Bill Tate
Assistant Supt. Fisheries

Fishing is a state-wide contagion that reaches epidemic proportions each spring. Since there is no cure, we will offer some tips that we hope will add to your enjoyment as the "disease" runs its course.

TROUT

The first "warm spell" finds many aspiring Izaak Waltons in northeast Iowa prospecting for trout. Fly fishing gear was developed for catching trout and is the most productive of all types of fishing gear. In clear water, trout feed by sight. In the spring, they will be feeding chiefly on immature aquatic insects and fresh water shrimp.

The insects will include the May flies (*Ephemeroptera*), caddis flies (*Tricoptera*), the true flies (*Diptera*) and stone flies (*Plecoptera*). Other insects will be taken, but most of the insect food items are in the groups named above. The immature stages of these insects that are taken as food may be a larval, or worm stage, such as the "goose worm" which is highly regarded as a natural bait for trout, or may be a naiad or nymph stage, which is easily recognizable as an insect. The May flies and stone flies persist in the naiad stage for almost a year or longer, and are adults for a relatively short time. May flies live only a few hours in the adult or sexual form. These insects and fresh water shrimp are the meat and "bread and butter" of the trout. In early spring only the small midges (true flies) and a few stone flies occur as adults. Artificial nymphs, and sparsely dressed wet flies are therefore most productive in early spring. For the dyed-in-the-wool dry fly trout fisherman—gray or black lightly dressed dry flies in sizes 18 to 22 will simulate the small midges or black gnats that skim above the surface of the water and alight occasionally. "Midge" fishing can be very rewarding to those that master the technique of using these tiny dry flies.



Here is one popular method to store line while fly-casting. The angler is left-handed.

Streamer flies and bucktails that represent minnows or other small fish may be used to take larger trout. A big bait will not always catch a large fish, however, for many large trout continue to feed on small insects. Early in the year, most of the insect food items taken by trout are small and small wet flies and nymphs will be more effective than larger ones. Size 10 and smaller sizes will produce more strikes than larger flies. Rocks lifted from the stream bottom will have various insects clinging to them. After examining these insects, the fisherman may select artificial flies that match them in color and size.

Trout normally remain motionless at a feeding station, and take food items delivered to them by the current. To present a wet fly or nymph effectively in flowing water, an up-stream cast is necessary. As the lure drifts downstream, slack should be removed from the line so that the hook can be set at any slow-down or unnatural movement of the line. A small piece of white cloth or tape at the junction of the fly line and leader will act as a "bobber" to help detect that a trout has taken the underwater lure. Trout quickly eject a wet fly or artificial nymph, and it is essential to know when a fish strikes, and to set the hook quickly when the lure is taken. Any side movement, slow down or stoppage of the line or leader should be a signal to set the hook!

Streamer flies and large nymphs that represent the larger swimming food items may be fished with a jerky retrieve to simulate the darting action of the minnow, darter or other creature it resembles. These lures may be used effectively in the deep water areas and may be retrieved upstream with good results. Trout do pursue and catch the larger animals they eat. When a trout follows this type of lure increasing the speed of the retrieve will often provoke a strike!

The small crustaceans or "fresh water shrimp" that are abundant in the water cress and other vegetation in the trout streams are a preferred food item for many trout. A small fly (size 16 to 12) made of "dubbed" muskrat fur or other gray natural fiber (see accompanying illustration) will often take trout. These "shrimp" and the small insect nymphs that can be picked from rocks in riffle areas can be used for bait on small hooks tied to fine leaders. They are particularly effective in clear water. The "shrimp" should be fished in or around water cress beds or other vegetation. The insect nymphs or larvae should be drifted into pools from the riffles where they normally occur.

Jack Kirstein P

Some popular fly patterns. For trout, left column-top to bottom: optic streamer (10), wet fly trimmed to make a nymph (size 10), fresh water shrimp (size 10), mi pupa, wet fly (size 20), black ant (size 12), midge dry fly (size 20). For crappie perch, middle column—top to bottom: tri-color streamer, tri-color streamer, large ca larva (in case), small caddis larva (size 14). Also crappie and perch, right colum top to bottom: marabou streamer, "squirrel" tail fly, hair wing wet fly, bucktail fl

During periods when the water is turbid or muddy, the angle worm or "garden hackle" is the most effective bait for trout. A worm should be fished with a natural drift so that it is delivered to the feeding trout by the current. Since trout seldom move more than a few inches to take a bait, several drifts should be made through a "fishy" area.

CRAPPIE AND PERCH

In the inland streams, artificial lakes and natural lakes, the early fly fishing is for crappie and/or yellow perch. In the natural lakes area, these species are often caught in open water around the shore before the "ice goes out." The same flies will produce crappie and perch where they occur together with a bonus of white bass in some areas. Crappie and perch in the natural lakes concentrate at inlets where water enters the lakes from sloughs or creeks, around rocky points, reefs and at edges of old bullrush beds. There usually are two peak periods of activity along shore, at dawn and at dusk. At these times, the best fishing is from shore.

In river impoundments and artificial lakes, crappie will move close to shore and are found in and around brush piles, tree tops, stumps and willows growing al shore. At times, they will taken very near shore in wa barely deep enough to cover th When they are "on shore" crap may be caught from the shore from a boat.

In the inland streams, crap concentrate in or immediately low the mill race dams, at pipe stream inlets. Brush cover or lows growing in the water are likely crappie beds.

In the Mississippi River, M souri River and areas associa with the large border strea crappie move "on shore" in shal areas at creek mouths, aro piling and entrances to backwat and sloughs.

Crappie fishermen don't m company, and will share their spots with newcomers. Busi people and fishermen near fish waters will be glad to direct to crappie fishing spots.

The same flies and fishing t nique will take crappie and ye perch in the spring. Strea flies and bucktails are the m productive. A variety of co are used, but combinations of or more colors including yellow, black and white are m often used.

There are two requisites for cess—fish the fly very close bottom, and fish it slowly. A and pause retrieve will account most of the fish and many of strikes will occur during pause! A hand knit retrieve strip and pause retrieve (see

(Continued on page 32)

Animals That Hide Underground

David H. Thompson

hole in the ground has an air nystery about it that rouses curiosity. No matter whether s so small that only a worm d squeeze into it, or large igh for a fox den, our ques- s are much the same. What nal dug that hole? Is it down e now? What is it doing? en will it come out?

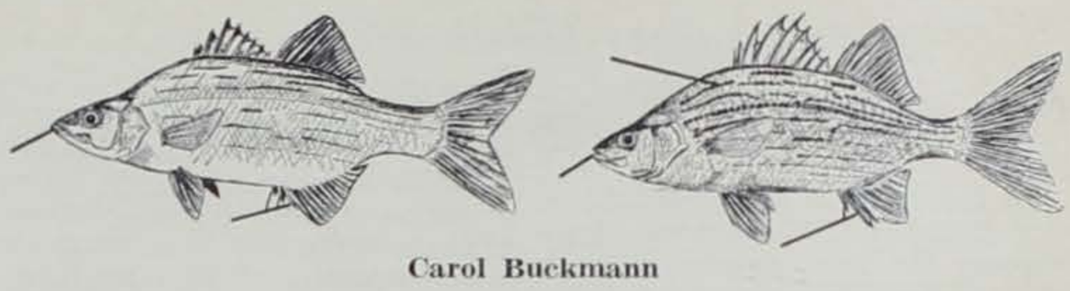
n underground burrow has sev- advantages for an animal. In many kinds find safety from nies for themselves and their ng. For others, it is an air- litioned escape from the burn- sun of summer and a snug re- t away from the winds and of winter. The moist atmos- e of a subterranean home al- the prolonged survival of a variety of lower animals ch, above the surface, would perish from drying.

The woodchuck or groundhog is a famous excavator, digging numerous burrows on gravelly slopes, roadsides and in open fields. Each burrow is a wide branching tunnel with two or more entrances. In it they sleep at night, rear their young, and hibernate in a torpid condition from late October until March. These woodchuck homes are frequently taken over by foxes and skunks to rear their own families and, in winter, they also are used by raccoons, opossums, mink and rabbits.

Several smaller native rodents live in burrows. Like the woodchuck, the 13-striped ground squirrel and Franklin's ground squirrel sleep through the winter below the frost line. In his burrow a chipmunk stores seeds, nuts and grain for winter rations. Many muskrats, instead of building winter

(Continued on page 31)

WHITE BASS—YELLOW BASS?



Carol Buckmann

Two fish commonly confused are the yellow and white bass, the only real members of the bass family to swim in Iowa waters. That's right, the large and smallmouth bass are not true bass but really sunfish.

Although shaped alike, the yellow bass (*Roccus chrysops*) have dark olive-green backs, silvery to bright golden-yellow sides and six to seven prominent stripes on their sides, clearly distinguishing them from their close cousins, the silvery-colored white bass (*Roccus mississippiensis*). Three of the stripes are above the lateral line. Those below the line are interrupted near the tail.

Also, the anal spines are not evenly graduated in length as they are in white bass. The first spine is scarcely one-third as long as the second spine while the second and third are almost equal in length.

Next time you catch a bass but aren't sure which it is, look at the mouth, if the jaws are about equal in length and it fits the above description, it's probably a yellow bass as the white variety have a distinct under-bite. There are several small teeth on the tongue of white bass not present in the yellows.

Yellow bass, the most abundant game fish in Clear Lake, are also known as streakers, black-striped bass and gold bass.

Besides in Clear Lake, yellow bass occur in varying abundance in some natural lakes, oxbows, artificial lakes and in the Mississippi River. They have spread from Clear Lake into the upper Cedar River drainage and are common in Hartwick Lake, an impoundment of the Maquoketa River.

Their close cousins, the white bass, commonly called silver bass, striped bass, silver fish and streakers, are dark gray to black on their backs with bright silvery sides and several dusky stripes or lines running laterally. The first three rays of the anal fin are graduated with the first spine about half the length of the second and this distinctly shorter than the third.

White bass are most abundant in the Mississippi River and the lower reaches of its tributaries. They occur in varying numbers in some natural and artificial lakes, oxbows on the Missouri River and in the eastern Iowa river impoundments.

IOWA BIRD MIGRATION CALENDAR

bulletin giving the average dates of arrival of various birds calculated for Iowa been prepared by Bob Moorman, Extension Wildlife Conservationist at Iowa State. s may be obtained by writing Moorman at the Cooperative Extension Service in s.

all	March 15	November 4
rican Pintail	March 5	November 16
n-Winged Teal	March 12	November 8
Winged Teal	March 18	November 4
l Duck	March 20	October 26
ead	March 18	October 25
as-Back	March 18	November 3
r Scaup Duck	March 9	November 21
-Head	March 25	November 6
y Duck	April 5	October 28
rican Merganser	March 20	November 12
ey Vulture	April 1	October 18
rn Red-Tailed Hawk	March 12	November 16
Shouldered Hawk	March 14	October 16
dwinged Hawk	March 24	October 28
nson's Hawk	April 14	September 25
h-Legged Hawk	October 16 (from north)	March 25
h Hawk	March 1	November 14
rn Sparrow Hawk	March 14	October 12
Rail	April 17	September 25
nia Rail	April 24	October 15
rican Coot	March 25	November 20
eer	March 10	November 4
rican Woodchuck	April 9	October 28
n's Snipe	March 25	November 25
nd Plover	April 16	August 31
rn Solitary Sandpiper	April 23	October 10
er Yellowlegs	April 10	September 25
ing Gull	April 4	November 12
parte's Gull	May 1	October 4
non Tern	April 28	September 20
ning Dove	March 24	October 25
w-Billed Cuckoo	May 16	September 25
-Billed Cuckoo	May 12	September 22
Owl	Partially migratory	
rn Screech Owl	Permanent resident	
Horned Owl	Permanent resident	
ern Barred Owl	Permanent resident	
-Eared Owl	Partially migratory	
-Eared Owl	Permanent resident	
rn Whip-poor-will	April 26	September 18
rn Nighthawk	May 3	September 25
ney Swift	April 18	September 16
-Throated Hummingbird	May 7	October 1
rn Belted Kingfisher	March 27	November 18
ern Flicker	March 20	October 22
Bellied Woodpecker	Permanent resident	
Headed Woodpecker	May 1	November 20
w-Bellied Sapsucker	April 3	October 15
rn Hairy Woodpecker	Permanent resident	
ern Downy Woodpecker	Permanent resident	
nsas Kingbird	May 8	September 8
ern Crested Flycatcher	May 8	September 15
rn Phoebe	March 18	October 14
rn Wood Pewee	May 7	October 1
ie Horned Lark	Partially migratory	
Swallow	April 5	October 1
Swallow	April 20	September 21
h-Winged Swallow	April 19	September 4
Swallow	April 20	September 24
Swallow	April 24	September 18
le Martin	April 8	September 3
ern Blue Jay	Permanent resident	
-Capped Chickadee	Permanent resident	
d Titmouse	Permanent resident	
e-Breasted Nuthatch	Permanent resident	
n Creeper	Permanent resident	
ern House Wren	April 26	October 5
rn Winter Wren	April 4	September 30
-Billed Marsh Wren	May 6	September 25
rd	May 1	October 3
n Thrasher	April 16	October 1
rn Robin	March 8	November 12
Thrush	May 3	September 22
rn Hermit Thrush	April 10	October 10
-Backed Thrush	May 10	September 24
Eastern Bluebird	March 8	October 30
Blue-Gray Gnatcatcher	April 15	September 1
Golden-Crowned Kinglet	April 2	October 16
Ruby-Crowned Kinglet	April 10	October 8
Cedar Waxwing	March 7	October 12
Migrant Shrike	March 28	October 26
Red-Eyed Vireo	May 6	September 21
Black and White Warbler	April 27	September 24
Tennessee Warbler	May 10	September 17
Nashville Warbler	May 6	October 2
Eastern Yellow Warbler	May 3	September 12
Magnolia Warbler	May 12	September 14
Myrtle Warbler	April 20	September 10
Ovenbird	May 5	September 25
Grinnells Water Thrush	May 7	September 15
Louisiana Water Thrush	April 23	September 1
Northern Yellow-Throat	May 7	September 29
American Redstart	May 8	September 25
Bobolink	May 1	September 28
Eastern Meadowlark	March 10	October 20
Western Meadowlark	March 12	October 18
Yellow-Headed Blackbird	April 14	October 9
Red-Wing Blackbird	March 12	November 17
Orchard Oriole	May 10	August 2
Baltimore Oriole	May 1	September 7
Rusty Blackbird	March 21	October 17
Bronzed Grackle	March 14	November 11
Eastern Cowbird	April 10	August 24
Scarlet Tanager	May 8	September 15
Eastern Cardinal	Permanent resident	
Rose-Brested Grosbeak	May 1	September 21
Indigo Bunting	May 6	September 27
Dickcissel	May 16	September 6
Eastern Purple Finch	March 24	October 16
Pine Grosbeak	November 2	March 30
Common Red Poll	October 22	April 12
Northern Pine Siskin	April 24	October 16
Eastern Goldfinch	Permanent resident	
Red Crossbill	Irregular winter visitant	
White-Winged Crossbill	Irregular winter visitant	
Red-Eyed Towhee	April 14	October 17
Grasshopper Sparrow	April 28	September 27
Eastern Vesper Sparrow	April 2	October 23
Eastern Lark Sparrow	April 21	July 30
Slate-Colored Junco	Winter Visitant	
Tree Sparrow	March 30	October 24
Eastern Chipping Sparrow	April 1	October 18
Clay-Colored Sparrow	April 18	October 12
Field Sparrow	April 11	October 12
Harris' Sparrow	May 9	October 7
White-Crowned Sparrow	May 6	October 9
White-Throated Sparrow	April 26	September 30
Eastern Fox Sparrow	April 6	October 10
Song Sparrow	March 20	November 9
Lapland Longspur	October 23	March 18
Eastern Snow Bunting	November 6	March 10

YOU CAN MAKE THESE LEADHEADS

Add another dimension to your fishing enjoyment

Jack Kirstein

A fisherman is an unpredictable individual. He will burn up many dollars worth of gasoline driving to a fishing hole and think nothing of it. He will buy cans of bait and buckets of minnows galore and never mention the cost, even though he may not catch a fish or get a bite. If, however, he snags a lure on an underwater object such as a rock, or log, and after much pulling and strong language reels in a limp line minus his favorite lure, LOOK OUT!

Especially in the case of the lead-head or jigging lure, this cost of lost artificial baits can be considerable. Its heavy weight takes it down into the clutter of the river or lake bottom.

Here it is a natural prey of the thousands of little cracks and protrusions that hold it tightly once it becomes entangled.

You can lower this continuing cost of lost lures by making the jigs yourself.

To hold the lure as you tie on the streamer material, you will need a fly tying vise. Some small scissors, a bobbin for wrapping the thread, and for the particular worker a whip finisher and hackle pliers, should be all that you will need. These last two items are not absolutely essential, but they will help to turn out professional appearing lures.

Materials needed would include: the lead heads themselves, already cast on the hooks, threads of the colors you wish to tie, several colors of bucktail, maribou, and hackle streamers, etc. If you wish to make some elegant presentations to those big lunkers that so far have eluded your lures, you might include various lengths of brightly colored chenille.

If the precast leadheads are not available from your favorite tackle supplier, perhaps you can buy a few from a friend who is now making his own lures. It is also possible to buy molds, melt down surplus lead, and cast your own on the hooks. If you want a different shape of leadhead than is available in molds, you might try building a mold by hand. This can be carved into hard carbon, using a knife. Hot lead can cause severe burns, so take precautions to prevent spillage and splatters that might give you trouble.

When the lead heads are ready for tying, they are placed in the vise. The hook is gripped in the vise along its curve. To prevent hook pricks, you can grip the hook so the point is protected by the ends of the vise.

Place the thread in the bobbin, and starting at the curved end of the shank of the hook, make a half dozen wraps. Overlap these three or four times to make sure the thread will not unravel. If you are using streamers at the rear end of the lure, tie them on first. You will be working from the curved part of the hook forward to the head.

If you are making chenille bodies, they come next. After this comes the collar or forward end of the material.

For a simple bucktail lure, all that is necessary is to cut the bucktail to the size you need to cover back past the curve of the hook, and tie it by wrapping the thread tightly as you hold it in place.

Keep your material evenly spaced around the hook. Keep the thread tight at all times while winding and trying to prevent any possibility of your material falling out while the lure is in use.

Several half-hitches are used to secure the final end of the thread. Coat these wrappings with a waterproof cement.

Lead-heads are used in several weights ranging approximately ⅛, ¼ and ⅜ of an ounce. This is to guide you in making your own mold. Commercially sold molds have several sizes incorporated into their design.

Purchasing your thread, you will find "A" thread is used mostly in tying marabou, hackle, and chenille. Thread of the "D" weight is used mainly for bucktail.

In tying marabou feathers on a lead-head, use as much as you can hold. Start near the head of the lure and wrap toward the back, until secure.

For a nice dry-fly look to the lure, use a long hackle feather and hackle pliers to apply the collar.

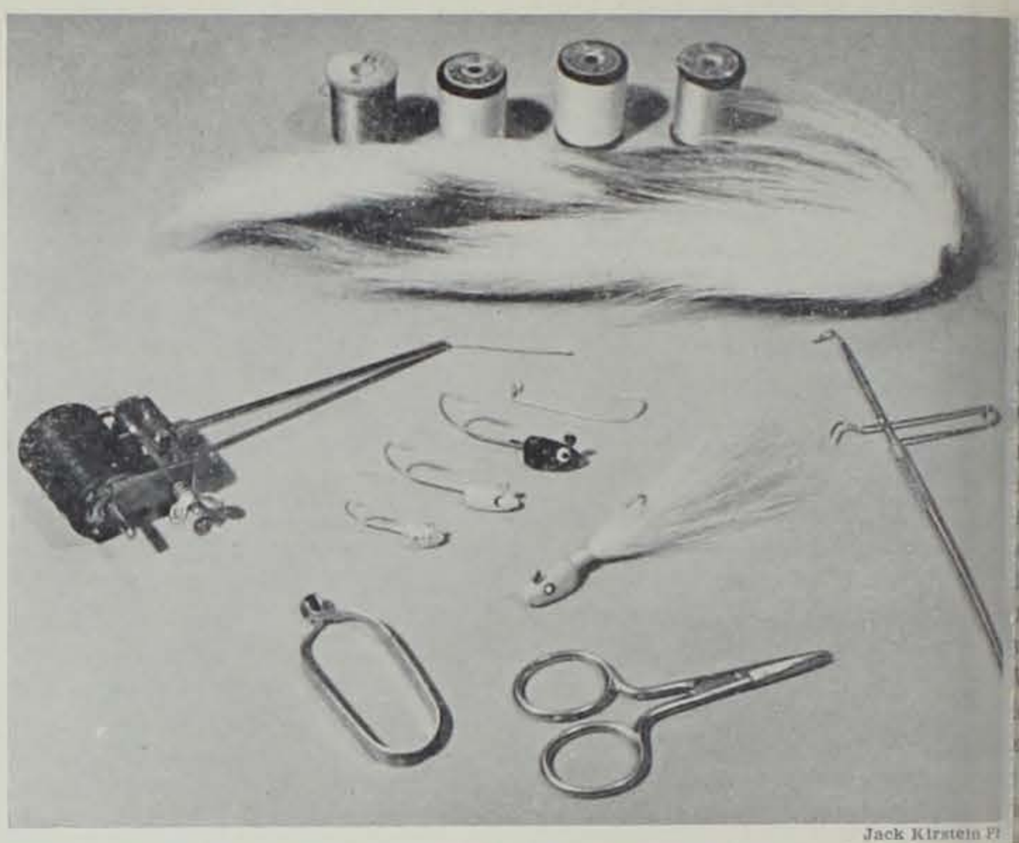
In choosing colors for your jigs, use those that normally appeal to the fish in other lures. Bass may be attracted more to dark colors. You may want to try black in combination with white, or red, or perhaps even a small amount of yellow.

Perhaps the walleye will show more fight when presented with an all white or all yellow, but your own experience as a guid

By using small hooks, and plying split shot carefully wit pair of ordinary pliers, you devise light weight lead-heads pan fish.

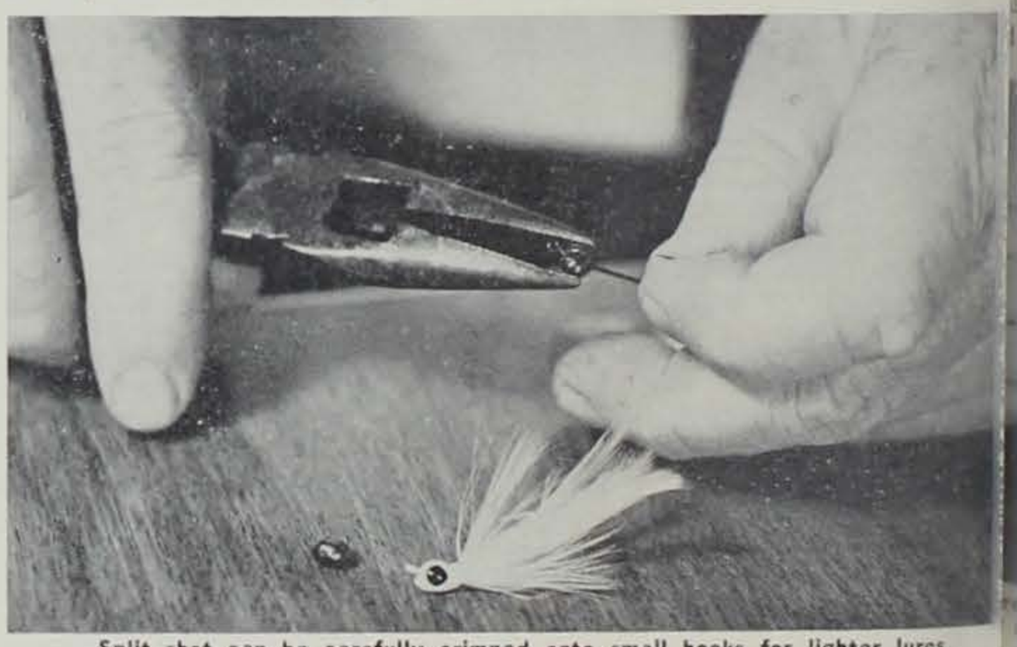
Gold plated hooks afford anot splash of color to your final pr uct.

Let your imagination run wil your lures, and perhaps you come up with a new fish catche make you famous or, at the least, catch fish for your own ing pan.

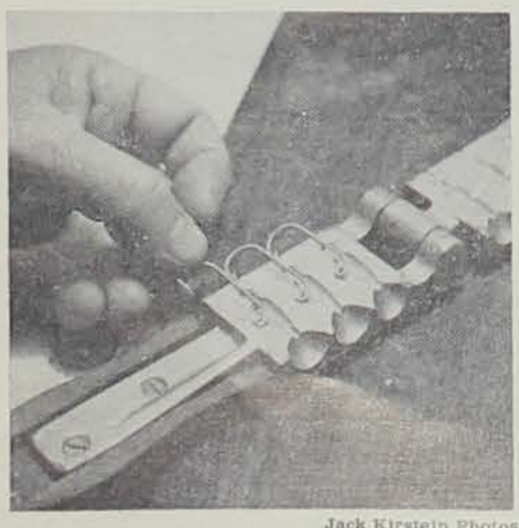


Jack Kirstein Ph

Some leadhead-tying materials: bucktail and thread, and (counter-clockwise) bob hackle pliers, scissors, and whip finisher.

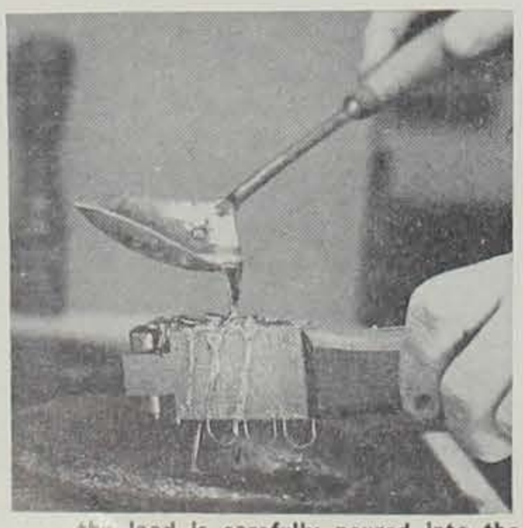


Split shot can be carefully crimped onto small hooks for lighter lures.

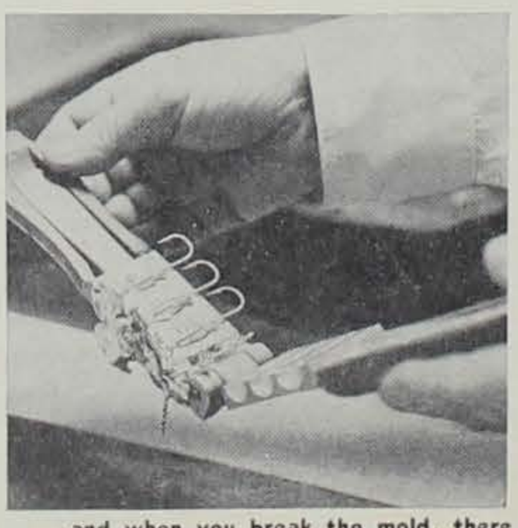


Jack Kirstein Photos

The hooks are placed in the mold . . .



. . . the lead is carefully poured into the mold . . .



. . . and when you break the mold, there are your leadheads.

In many snakes, the pupil the eye is round, but in the vi ids, which includes rattlesna it is vertically elliptical. Sna with this type of pupil tend move about at night.

The Oregon slender salaman becomes active on the surfac spring following the melting snow and disappearance of fr ing temperatures.

The fisher is one of the mamm smart enough to eat a porcu without getting hurt.

New Hunting Dog Needed in Iowa

Tom Ballard

ly each spring men, women, ildren leave their homes and to the deep woods and haunts where they "know" can find morel mushrooms. morel is a sponge-like mush- that has a delicious, yet diffi- -describe flavor. Some en- sts claim morels taste "just hicken." Others think "sorta teak and chicken combined." atever the taste, these mush- hunters are just about as en- stic in their searches as the ed deer hunter and some- more devious in concealing avorite mushrooming grounds wife revealing the price of a oat.

at we're suggesting in this may revolutionize the mush- rs' sport and put morels on enu in homes where such us morsels have never been ned.

ve can develop coon hounds, ogs, fox hounds, Chihuahuas, enuine pure bred mountain curs, why not a **morel hound,** a dog that will hunt mushrooms.

There will be many specifications necessary for this morelshire hound, morel pointer, mushroamer, morel spaniel, or whatever name best fits the breed.

First of all, this hound must have NO appetite for raw mushrooms of any kind but must be possessed with a driving desire to hunt and point or bay morels. (depending upon the hunting pressure at the time and upon whose property you are hunting).

Next, let us consider paw size. Can you avid mushroomers imagine anything worse than a certain king-sized morel that you have dreamed of over the years and now that your morel hound has finally found it—CRUNCH! This dog's "pinkies" must be small enough to avoid the above catastrophe, yet large enough not to sink into the damp mushroom producing soils.

A dog in the 8-10 ounce class would solve this problem or maybe a boxer in the flyweight, crushproof category.

How tall should this moreler be? The most common recommendation we have heard is "somewhere between a tall dachsund and a short doberman." If he is too short he will knock over too many of the real nice mushrooms in the good pickin' country and a high rangy hound would possibly overlook those tender "buttons" that are just starting to put on some size. The moreler has to be tall enough to be fairly visible when on silent point even in his camouflage colored spring coat.

Nose size and shape is one of the most important characteristics of our mushrooming dog. Because he will not be a ground scent pooch but will hunt by air scent only, a large, radar shaped nose is essential for real success each spring. At first, dog breeding experts thought this would prove to be the downfall of the breed while it was still on the drawing boards but one keen-minded gent showed that a third generation cross with a computer would dismiss all our worries.

Crossing our basic morelshire with a computer would give us all the advantages of a selective thinker. After all, who wants a hound that will retrieve poisonous species, insect-infested plants, or photographs of mushrooms planted by competing mushroomers. The computer cross would select the exact mushrooms the hunter indicated. (If fed the correct information of course.)

There seems to be some confusion as to whether we need a pointer, a silent trailer, a voice trailer, a retriever, or a mutt. There are distinct advantages to each of the above types but we need a brilliant dog that will have a style adaptable to the flora and the terrain. If this dog is to be a retriever he must have a mouth softer than a baby's cheeks. He must be a silent pooch at the peak of the hunting season especially when those cagey, oldtimers are sleuthing in the timber before dawn. No one wants some mouthy mutt disclosing the whereabouts of his secret rendezvous with the best morels in the corn state.

These are just a few suggestions for the ambitious and imaginative canine breeders. Fox hunters, coon hunters, upland game bird hunters, and many other hunters will confess that a good dog adds immeasureably to the thrill of the hunt.

Morel hunters let yourselves be heard! Encourage the development of this mushrooming pooch. The French hunt truffles (a subterranean fungus) with pigs. Why don't Iowans hunt mushrooms with dogs?

Let's change the old adage to "20,000 Iowans can't be wrong."

am makes a handy holder while you nting the lures.

done from the curve of the hood to the head.

roof cement completes the winding lure is ready for fishing.

SAUGER—WALLEYE?

Carol Buckmann

Some fish look so much alike, it's hard to believe they aren't what they appear to be. Take walleyes and saugers; without seeing them side by side and knowing a few distinguishing characteristics, they appear to be one and the same.

Put them together and you'll notice several differences. For one thing, the cylindrical bodied saugers are olive gray, brassy or yellowish-orange with sides mottled by dark blotches. They also have two or three rows of black dots on the first dorsal fin and a large black blotch at the base of the pectoral fin. Saugers are considerably smaller than walleyes.

Saugers also go by the names sand pike, river pike, spotfin pike, jack fish and jack salmon.

These tasty catches are limited to the boundary rivers and the lower ends of their major tributaries. They are common locally in the Mississippi and Missouri Rivers. Rarely saugers are taken from the Iowa Great Lakes and Lake Manawa but these are believed to be introduced.

Their cousins, the walleyes, are olive-buff, their sides sometimes shading to yellowish much like saugers but walleyes have no distinct dark bars or mottling on their sides. Rather, the mottling is over-all black or brown. Both are white beneath.

The spots on the dorsal fin of saugers are lacking in walleyes but there is a dark blotch at the base of the first dorsal fin usually coloring the lower portion of the last two or three fin rays. The lower lobe of the caudal or tail fin has a white spot especially noticeable in large specimens.

These fish range from occasional to common in northern Iowa's natural lakes and are locally abundant in the upper reaches of major inland river drainages being rare to absent in the Missouri River and its tributaries. Walleyes are common to abundant above Clinton in the Mississippi River. They are also known as pike-perch, walleyed pike, jack fish and jack salmon.

Both walleyes and saugers belong to the perch family, Percidae, and the same genus, Stizostedion characterized by having canine teeth in the roof of their mouths and palate. The species name for saugers is canadense and walleyes, vitreum vitreum.

UNDERGROUND—

(Continued from page 29)

houses of water plants, dig tunnels with underwater entrances into the banks of streams and ponds. There they are safe from all invaders except the bloodthirsty mink.

In this region kingfishers and colonies of bank swallows dig deep holes in steep sand or gravel banks in which they incubate their eggs and bring up their fledglings. Most of us have heard of the little owl that lives in prairie dog burrows in the western states.

Farmers, fishermen, bird watchers and gardeners are familiar with earthworms but few people realize their importance as earth movers and mixers. On an acre of fertile soil they may number into the millions and have a total weight of one-half ton—more than all underground animal life combined.

Insects—hundreds of species of them—pass the winter months in soil either as eggs, larvae, pupae or adults. With the arrival of warm weather, most kinds come up into the open air to carry on their active lives. Among the exceptions is the white grub or "grubworm" which hatches from a buried egg, spends two to three years feeding on grass roots. Then, after a pupal stage, emerges as our familiar June beetle.

Watch a busy ant colony on a warm afternoon. Columns of workers hustle in and out of their network of subterranean galleries, some bringing food, others carrying out granules of soil as the ant hill is enlarged. Sometimes you see an ant war as one species raids the colony of another to capture slaves.—*Cook County Forest Preserve.*

Jack Kirstein Photo

This large silver maple near Lorimor was a foot short of the national record. Circumference was 21 feet 6 inches; height was 52 feet; and the crown spread was 103 feet.

Have You Any Big Trees?

Denny Rehder

Iowa cottonwoods could be vying among themselves at present for the national record. The latest tree to be measured by the Commission was a 31 foot, 8 inch in circumference specimen from the Iowa River bottoms south of Tama.

This topped the 31 foot, ¾-inch tree east of Carson which the American Forestry Association had reported as being the top cottonwood in the nation, but a split disqualified the larger tree.

Many Iowans have asked about the big tree registration program carried out by the AFA and the steps necessary to qualify a tree for the record listing.

The AFA registration program hopes to stimulate greater appreciation of trees, establish a national library of reference material and, through the cooperation of the owners, to protect and preserve these monarchs to the end of their natural lives as cherished landmarks and as sources of seed to perpetuate the great size of their species.

According to the last record listing which came out in 1961, the largest tree on record is a giant sequoia with a circumference of 101 feet 6 inches. The smallest tree of championship size is a highbush blueberry with a circumference of 3¾ inches.

The tallest tree is a redwood in California towering at 368 feet 7 inches. The oldest known tree is a bristlecone pine estimated to be more than 4,600 years old.

Listed below is the most recent information we have on the national records for many common Iowa trees. If you think you have one larger than a listed record, please contact the Commission in Des Moines giving the information on the tree. Circumference is the most important measurement and it should be taken at a height of 4½ feet from the ground level around the tree. A steel tape should be used to obtain an accurate measurement. If there is a fork below this 4½-foot mark, the tree is considered a double tree and the larger trunk is then measured at 4½ feet. If there happens to be a growth or a branch at the measuring height, the measurement should be taken below the growth or branch at the point where the circumference is least. Also advise the Commission of the health and location of the tree.

In 1961 Iowa was listed among those states who had entered no trees of record caliber. It seems likely that the fertile soil of Iowa —among the world's finest—should also produce some giant trees in many species. The Conservation Commission would like to find some of these big trees.

Listed AFA Records to Common Iowa Trees

Species	Circumference (feet-inches)
ARBORVITAE	
Eastern or Northern White Cedar *Thuja occidentalis*	17-2
ASH	
White *Fraxinus americana*	22-3
ASPEN	
Bigtooth *Populus grandidentata*	9-11
Quaking *Populus tremuloides*	9-10
BIRCH	
Paper *Betula papyrifera*	10-11
River *Betula nigra*	12-4
BOXELDER *Acer negundo*	18-10
CATALPA	
Northern *Catalpa speciosa*	19-4
CHERRY	
Black *Prunus serotina*	23-4
Choke *Prunus virginiana*	3-0
COFFEETREE	
Kentucky *Gmynocladus dioicus*	12-4
ELM	
American or White *Ulmus americana*	24-7
Slippery *Ulmus fulva*	18-3
FIR	
Balsam *Abies balsamea*	9-5
HACKBERRY	
Common *Celtis occidentalis*	16-8
HICKORY	
Bitternut *Carya cordiformis*	12-6
Shagbark *Carya ovata*	10-4
HONEYLOCUST	
Common *Glenditsia triacanthos*	18-9
LINDEN: BASSWOOD	
American *Tilia americana*	16-11
LOCUST	
Black *Robinia pseudoacacia*	15-11
MAPLE	
Red *Acer rubrum*	20-8½
Silver *Acer saccharinum*	22-10
Sugar *Acer saccharum*	19-9
OAK	
Black *Quercus velvutina*	19-9
Bur *Quercus macrocarpa*	20-9
Pin *Quercus palustris*	16-0
Northern Red *Quercus borealis*	24-9
Shingle *Quercus imbricaria*	13-8
White *Quercus alba*	27-8
PINE	
Jack *Pinus banksiana*	6-2
Ponderosa *Pinus ponderosa*	27-1
Red *Pinus resinosa*	8-10
White, Eastern *Pinus strobus*	17-2
PLANETREE: SYCAMORE	
American *Platanus occidentalis*	32-10
POPLAR: COTTONWOOD	
Eastern Poplar Populous deltoides	31-¾
REDCEDAR	
Eastern *Juniperus virginiana*	13-4
SPRUCE	
Black *Picea mariana*	3-¾
White *Picea glauca*	10-1
WALNUT	
Eastern Black *Juglans nigra*	20-3
WILLOW	
Babylon Weeping *Salix babylonica*	13-5
Black *Salix nigra*	26-1
Peachleaf *Salix amygdaloides*	6-9
Pussy *Salix discolor latifolia*	3-7
Sandbar *Salix interior*	1-1

EARLY SPRING—

(Continued from page 28)

stration) will produce the desired action of the fly, and will maintain line control so that the hook can be set when a fish takes the fly.

In the fast water below dams, weighted streamers may be used or a split shot may be placed a foot to 18 inches above the fly to sink it to the level of the feeding crappie.

Occasionally, in April or early May, a hatch of dipterid flies occurs in the artificial or natural lakes. The pupae of these flies which resemble large mosquitoes, swim to the surface from the bottom in deep water and emerge as adult flies. At this time, crappie and other fish congregate in large schools on or near the surface and feed on the pupae as they are about to emerge. As the fish feed their movements cause small rings or bulges on the surface. On a quiet day, these "dimples" can be seen from shore to locate the feeding fish. To catch these fish, small hair wing flies, or gray squirrel bucktails, size 12 or 10, should be cast into the feeding fish and allowed to sink a short distance. The fly should then be retrieved to the surface in a series of jerks. Strikes will come just before the fly reaches the surface. A floating line will make this technique more effective. In addition to crappie, several species of bass may be taken when they are feeding on surfacing insects. Late in the year, May fly and caddis fly hatches will produce the same type of fishing bonanza on the Mississippi River, and adjacent sloughs, lakes and chutes, in addition to the lakes.

Shake the moth crystals out of the fly box, and flex the casting arm. It's time to go fishing!